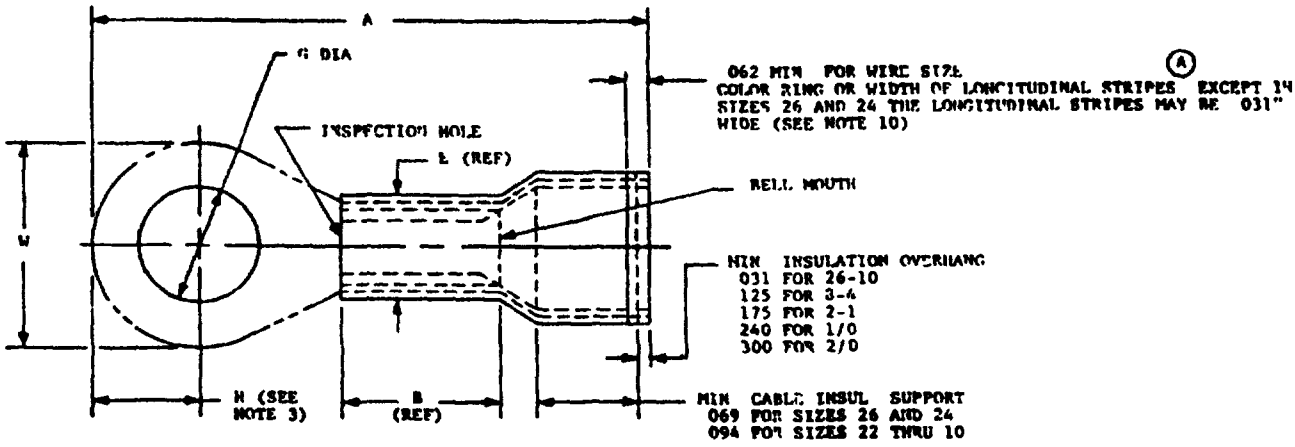
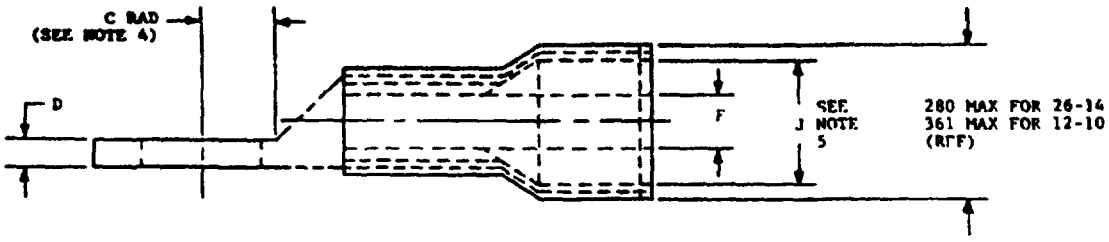
MILITARY SPECIFICATION SHEET

(A) TERMINALS, LUG AND SPLICES, CONDUCTOR, CRIMP STYLE, COPPER
TERMINAL, LUG, INSULATED, RING TONGUE, BELL-MOUTHED, TYPE II, CLASS 1
(FOR 150°C TOTAL CONDUCTOR TEMPERATURE)

This specification is approved for use by all Departments and Agencies of the Department of Defense

The complete requirements for acquiring the terminal described herein shall consist of this document and the latest issue of Specification MIL-T-7928





REQUIREMENTS

1 INSULATION MATERIAL SEE MIL-T-7928

2 FINISH:
TIN-PLATED IN ACCORDANCE WITH MIL-T-10727 OR NICKEL-PLATED IN ACCORDANCE WITH QQ-N-290, CLASS 1 WITH A THICKNESS OR GRADE SUFFICIENT TO MEET THE PERFORMANCE REQUIREMENTS OF THE ACQUISITION SPECIFICATION.

VALIDATION OF CORROSION PROTECTION REQUIREMENTS SHALL BE MADE FOR EACH LOT AS SPECIFIED IN THE ABOVE COATING SPECIFICATIONS.

3. QUALIFICATION. FOR QUALIFICATION, TERMINALS SHALL BE TESTED WITH ANY ONE OF THE FOLLOWING. MIL-W-81044/6, /7, /8, /9, /10, /12, /13, OR MIL-W-22759/16, /17, /18, /19 WIRE AND TOOLING AS FOLLOWS

(A) MIL-C-22520/5-01 TOOLING WITH MIL-C-22520/5-100 DIES INSTALLED FOR SIZES 22 THROUGH 10 TERMINALS, OR MIL-C-22520/10-01 TOOLING WITH MIL-C-22520/10-101 DIES INSTALLED FOR SIZES 26 THRU 14 TERMINALS AND MIL-C-22520/10-100 DIES INSTALLED FOR SIZES 12 THRU 10 TERMINALS MS23002 CRIMPING DIES TO BE USED WITH MS25441 TOOL FOR SIZES 8 THRU 2/0 EXISTING MS90413 AND MS3316 TOOLS IN THE FIELD MAY BE USED UNTIL WORN OUT

4 COLORS INSULATING SLEEVE COLOR SHALL BE CLEAR, UNCOLORED COLOR OF CIRCULAR RING OR LONGITUDINAL STRIPES SHALL BE AS SPECIFIED IN TABLE I AND SHALL BE IN ACCORDANCE WITH EIA STANDARD RS359

5 PART NUMBER THE PART NUMBER SHALL CONSIST OF THE LETTER "M", SPECIFICATION SHEET NUMBER AND DASH NUMBER EXAMPLE OF PART NUMBER M7928/4-103 TERMINAL FOR SIZE 22-18 WIRE WITH A .190 STUD HOLE

(A) DENOTES CHANGES

FSC 5940

(A) TABLE I Dash numbers and characteristics

Dash no	Terminal size	Stud size	A Max	B Ref	C Min Rad	D Max	D Min	E dia	F dia	G dia Max	G dia Min	J min dia	W Max	W Min	Color of circular ring or longitudinal stripes
143	26-24	2 (.086)	.740	126	.133	.028	.022	.215/.190	.033/.027	.098	.090	.084	.210	.133	Yellow
144		4 (.112)	.755		.171					.122	.114		.260	.193	
145		6 (.138)			.202					.152	.142			.245	
146		8 (.164)	.855							.178	.168		.330		
147		10 (.190)	.865		.227					.203	.193				
159	22-18	2 (.086)	.755	156	.115	.035	.027	.215/.190	.073/.052	.098	.090	.120	.230	.198	Red
148		4 (.112)			.125					.122	.114			.210	
101		6 (.138)								.152	.142		.260	.245	
102		6 (.138)	.865		.202					.178	.168		.320	.305	
149		8 (.164)	.910		.234					.203	.193		.473	.450	
103		10 (.190)			.265					.275	.260				
150		1/4 (.250)	1.090		.296					.338	.323		.540	.520	
104		5/16 (.312)			.328					.400	.385		.720	.705	
105		3/8 (.375)	1.320		.453					.525	.510				
151		1/2 (.500)	1.320												
152	16-14	4 (.112)	.774	156	.125	.035	.029	.240/.210	.095/.081	.122	.114	.153	.260	.240	Blue
106		6 (.138)			.202					.152	.142		.317	.302	
107		6 (.138)	.910							.178	.168				
153		8 (.164)			.234					.203	.193		.473	.450	
108		10 (.190)	.915		.265					.275	.260				
154		1/4 (.250)	1.085		.296					.338	.323		.540	.520	
109		5/16 (.312)			.328					.400	.385		.720	.705	
110		3/8 (.375)	1.225		.453					.525	.510				
155		1/2 (.500)	1.320												
111	12-10	6 (.138)	1.120	234	.202	.043	.037	.300/.275	.139/.129	.152	.142	.210	.380	.365	Yellow
156		8 (.164)			.234					.178	.168				
112		10 (.190)			.265					.203	.193		.536	.516	
157		1/4 (.250)	1.322		.296					.275	.260		.598	.573	
113		5/16 (.312)			.328					.338	.323		.720	.705	
114		3/8 (.375)	1.414		.453					.400	.385				
158		1/2 (.500)								.525	.510				
115	8	10 (.190)	1.402	315	.234	.084	.038	.350/.399	.186/.176	.203	.193	.257	.429	.386	Red
116		1/4 (.250)	1.466		.265					.275	.260		.478	.435	
117		5/16 (.312)	1.544		.296					.338	.323		.590	.547	
118		3/8 (.375)			.328					.400	.385				
119	6	10 (.190)	1.599	375	.238	.087	.043	.410/.360	.232/.222	.203	.193	.300	.503	.460	Blue
120		1/4 (.250)			.265					.275	.260				
121		5/16 (.312)	1.762		.305					.338	.323		.623	.580	
122		3/8 (.375)			.328					.400	.385				
123	4	1/4 (.250)	1.817	437	.276	.096	.047	.500/.425	.299/.289	.275	.260	.370	.570	.480	Yellow
124		5/16 (.312)	1.879		.308					.338	.323		.648	.605	
125		3/8 (.375)			.328					.400	.385				
126	2	1/4 (.250)	2.069	505	.343	.109	.054	.540/.510	.365/.355	.275	.260	.453	.711	.668	Red
127		3/8 (.375)								.400	.385				
128		1/2 (.500)	2.269		.453					.525	.510		.804	.740	
129	1	1/4 (.250)	2.150	565	.383	.125	.070	.620/.560	.392/.388	.275	.260	.590	.793	.740	White
130		3/8 (.375)								.400	.385				
131		1/2 (.500)	2.370		.453					.525	.510		.987	.740	
132	0	1/4 (.250)	2.401	.630	.418	.125	.070	.685/.625	.458/.438	.275	.260	.550	.853	.810	Blue
133		3/8 (.375)								.400	.385				
134		1/2 (.500)	2.525		.453					.525	.510		.903	.860	
135	00	5/16 (.312)	2.750	.700	.473	.129	.075	.755/.685	.520/.509	.338	.323	.610	.956	.913	Yellow
136		3/8 (.375)								.400	.385				
137		1/2 (.500)								.525	.510				

METRIC TABLE

INCH	mm	INCH	mm	INCH	mm	INCH	mm
022	0.56	.176	4.47	375	9.53	648	16.46
.027	0 69	178	4.52	380	9.65	668	16 97
.028	0 71	186	4 72	383	9 73	685	17 40
.029	0 74	190	4 83	385	9 78	690	17 53
.031	0.79	.193	4.90	386	9 80	700	17 78
.033	0 84	202	5.13	388	9.86	705	17 91
.035	0 89	.203	5 16	.398	10 11	711	18.06
.037	0 94	210	5.33	400	10.16	.720	18 29
038	0.97	.215	5.46	410	10 41	740	18.80
.043	1 09	222	5.64	418	10 62	755	19.18
.047	1.19	.227	5.77	425	10 80	774	19 66
.052	1 32	230	5 84	429	10 90	783	19.89
.054	1 37	.232	5.89	435	11 05	804	20.42
.062	1 57	234	5.94	437	11 10	810	20 57
.069	1.75	238	6 05	.438	11 13	853	21 67
070	1 78	.240	6.10	453	11 51	855	21 72
073	1.85	245	6 22	458	11 63	860	21 84
075	1 91	.250	6.35	460	11 68	865	21 97
.081	2 06	257	6.53	473	12 01	837	22 53
084	2 13	260	6.60	478	12 14	903	22 94
.086	2.18	265	6 73	480	12 19	910	23 11
090	2 29	.275	6.99	500	12.70	913	23 19
.094	2 39	276	7.01	503	12 78	915	23 24
.095	2 41	.280	7.11	.505	12.83	956	24 28
096	2 44	.290	7.37	.510	12 95	1 085	27.56
.098	2.49	.294	7 52	516	13.11	1.090	27 69
109	2 77	300	7.62	520	13 21	1 120	28 45
112	2 84	.302	7 67	525	13.34	1 225	31 12
114	2 90	.305	7 75	536	13 61	1 320	33 53
120	3 05	308	7 82	540	13 72	1 322	33 58
122	3 10	.312	7 92	547	13 89	1 402	35 61
125	3 18	315	8 00	550	13 97	1 414	35 92
126	3 20	317	8 05	560	14 22	1 466	37 24
129	3 28	.320	8 13	565	14 35	1 544	39 22
133	3 38	323	8 20	570	14 48	1 599	40 61
138	3 51	328	8 33	573	14 55	1 762	44 75
139	3 53	330	8.38	580	14 73	1 812	46 02
142	3 61	.338	8 59	590	14 99	1 879	47 73
152	3 86	343	8 71	598	15 19	2 069	52 55
153	3 89	.350	8.89	605	15 37	2 150	54 61
.156	3 96	355	9 02	.610	15 49	2 269	57 63
164	4 17	360	9 14	620	15 75	2 370	60 20
168	4 27	361	9.17	.623	15 82	2 401	60.99
.171	4.34	.365	9.27	.625	15 88	2.525	64 14
175	4 45	.370	9.40	.630	16 00	2 750	69 85

NOTES

1. DIMENSIONS ARE IN INCHES
2. METRIC EQUIVALENTS (TO THE NEAREST .01 mm) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 mm
3. "E" MAX AND MIN DIMENSIONS SHALL BE ONE HALF OF "W" MAX AND MIN DIMENSIONS, RESPECTIVELY
4. "C" MIN DIMENSIONS IS MIN WASHER CLEARANCE RADIUS.
5. DIMENSIONS "J" REPRESENTS THE MIN ID OPENING THAT WILL ACCEPT THE FINISHED WIRE
6. MAX AND MIN DIMENSIONS DUE TO OVALIZATION, MUST BE WITHIN 3% OF SPECIFICATION REQUIREMENTS
7. CONTOUR INDICATED BY PHANTOM LINES MAY VARY FROM THAT SHOWN TO SUIT INDIVIDUAL MANUFACTURER'S DESIGN
8. INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION.
9. WIRE INSERTION SHALL BE FACILITATED BY BELL MOUTH
10. (A) THE COLOR RING MUST COVER A MINIMUM OF 315° OF THE CIRCUMFERENCE. IN LIEU OF THE WIRE SIZE COLOR RING, 3 OR MORE LONGITUDINAL STRIPES EQUALLY SPACED ON THE INSULATION PORTION OF THE TERMINAL MAY BE USED THE STRIPES MUST EXTEND TO WITHIN 1/16" OF THE ENDS OF THE INSULATION AND MUST NOT OBLITERATE THE BASIC SLEEVE COLOR

(A) TERMINAL LUGS MANUFACTURED PRIOR TO 8 JUNE 1981, AND MARKED WITH 2 LONGITUDINAL STRIPES MAY BE USED UNTIL THE SUPPLY IS EXHAUSTED

CUSTODIANS:
ARMY - ER
NAVY - AS
AIR FORCE - 85

REVIEW ACTIVITIES
ARMY - AV, MI, MU, EC
NAVY - SH
AIR FORCE - 99
DSA - GS

USER ACTIVITIES
ARMY - AT
NAVY - OS
AIR FORCE - 17

PREPARING ACTIVITY
NAVY - AS

(PROJECT 5940-0890)

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DOCUMENT IDENTIFIER (Number) AND TITLE MIL-T-7928/4A TERMINAL LUG, INSULATED, RING TONGUE, BELL-MOUTHED, TYPE II, CLASS 1 (FOR 150°C TOTAL CONDUCTOR TEMPERATURE)

NAME OF ORGANIZATION AND ADDRESS OF SUBMITTER

☐ VENDOR ☐ USER ☐ MANUFACTURER

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